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Quaternary Fault and Fold Database of the United States

As of January 12, 2017, the USGS maintains a limited number of metadata fields that characterize the Quaternary faults and folds of the United States. For the most up-to-date information, please refer to the interactive fault map.

Long Ridge (west side) faults (Class A) No. 2421

Last Review Date: 1999-10-01

Compiled in cooperation with the Utah Geological Survey

citation for this record: **Black, B.D., and Hecker, S., compilers, 1999, Fault number 2421, Long Ridge (west side) faults, in Quaternary fault and fold database of the United States: U.S. Geological Survey website, https://earthquakes.usgs.gov/hazards/qfaults, accessed 12/14/2020 02:55 PM.**

Synopsis	Poorly understood middle to late Pleistocene(?) faults on the western side of Long Ridge, west of Juab Valley.
Name comments	**Fault ID:** Refers to fault number 13-3 of Hecker (1993 #642).
County(s) and State(s)	UTAH COUNTY, UTAH JUAB COUNTY, UTAH
Physiographic province(s)	BASIN AND RANGE
Reliability of	Good

location	Compiled at 1:24,000 scale. *Comments:* Fault traces simplified from 1:24,000-scale mapping of Meibos (1983 #4536) and Jensen (1984 #4535).
Geologic setting	Generally north-trending range-front faults along the western side of Long Ridge between the Canyon Range and Gunnison Plateau. Long Ridge is in a transitional area between the Basin and Range and Colorado Plateaus provinces characterized by Cenozoic normal faulting superimposed on older thrust faulting. Long Ridge exposes both Paleozoic and Mesozoic strata and is likely underlain by the thrust-fault system.
Length (km)	15 km.
Average strike	N0°E
Sense of movement	Normal
Dip Direction	W
Paleoseismology studies	
Geomorphic expression	Scarps on alluvium. The fault forms a contact between bedrock and alluvium along much of its length, and both cuts and is buried by unconsolidated alluvium.
Age of faulted surficial deposits	Middle to late Pleistocene(?).
Historic earthquake	
Most recent prehistoric deformation	middle and late Quaternary (<750 ka) *Comments:*
Recurrence interval	
Slip-rate category	Less than 0.2 mm/yr
Date and Compiler(s)	1999 Bill D. Black, Utah Geological Survey

	Suzanne Hecker, U.S. Geological Survey
References	#642 Hecker, S., 1993, Quaternary tectonics of Utah with emphasis on earthquake-hazard characterization: Utah Geological Survey Bulletin 127, 157 p., 6 pls., scale 1:500,000. #4535 Jensen, M.E., 1984, Geologic map and section of the Slate Jack Canyon quadrangle, Juab and Utah Counties, Utah: Brigham Young University Geology Studies, v. 33, pt. 1, p. 1-19. #4536 Meibos, L.C., 1983, Structure and stratigraphy of the Nephi NW 71/2-minute quadrangle, Juab County, Utah: Brigham Young University Geology Studies, v. 30, pt.1, p. 37-58.